

The grffile package*

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Abstract

The package extends the file name processing of package `graphics` to support a larger range of file names. For example, the file name may contain several dots. Or in case of pdfTeX in PDF mode the file name may contain spaces.

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*The documentation here describes version 1.x, accessed via `\usepackage{grffile}[=v1]`, the current version 2.0 does nothing as the current `graphics` package handles multiple dots, spaces and UTF-8 characters in filenames

†Please report any issues at <https://github.com/ho-tex/grffile/issues>

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1 Usage

1.1 Option `multidot`

The file name parsing of package `graphics` is changed, in order to detect known extensions. This allows both the use of dots inside the base file name and extensions with several dots.

Assume there are two files in the current directory: `Hello.World.eps` and `Hello.World.pdf`. `\includegraphics{Hello.World}` will find `Hello.World.pdf` with driver `pdftex` or `Hello.World.eps` with driver `dvips`.

Limitations: Problem could occur on systems, which don't use the dot as extension delimiter. These systems needs an own `texsys.cfg` containing definitions for `\filename@parse`. The author could not test that, due to a missing example.

1.2 Option `babel`

This option allows the use of shorthand characters of package `babel` inside the graphics file name. Additionally the tilde '~' is supported. The option is turned on as default. (In version v1.1 or below of this package, the features of this option were part of option `extendedchars`.)

Example:

```
\usepackage[frenchb]{babel}
\usepackage{grffile}
Image:\includegraphics{C:/path/image}
```

1.3 Option `extendedchars`

If the input encoding is the same encoding as the encoding that is used for file names and the driver allows non-ascii characters. Without option `extendedchars` the 8-bit characters are expanded, if they are active characters. For example, see the L^AT_EX package `inputenc`. However a file name is not input for L^AT_EX. Therefore this option `extendedchars` removes the active status and the 8-bit characters are not expandable any more.

Example:

```
\usepackage[latin1]{inputenc}
\usepackage[extendedchars]{grffile}
\includegraphics{B ckerstra e}
```

If the `draft` option of the graphics package is enabled, the file name is printed with the current font encoding for `\ttfamily`. Thus it is possible, that such characters are omitted or the wrong characters are displayed, if the font encoding is not the same as the file name encoding.

1.4 Option `encoding`

Consider the following scenario. Your file system is using UTF-8 as encoding for file names. But you use `latin1` as input encoding for your T_EX files, because some packages are not ready for multi-byte encodings (`listings`, ...).

Then this option `encoding` loads support for converting encodings by loading package `stringenc`. The option is not defined after the preamble, because L^AT_EX limits package loading to the preamble.

File names are converted, if package `stringenc` is loaded and the encodings are known, see options `inputencoding` and `filenameencoding`.

1.4.1 Option `inputencoding`

Option `inputencoding` specifies the encoding of the file name in your T_EX input file.

Package `inputenx` and package `inputenc` since version 2006/02/22 v1.1a remember the name of the input encoding that is looked up by this package. Therefore option `inputencoding` is usually not mandatory.

1.4.2 Option `filenameencoding`

This is the encoding of the filename of your file system. This option is mandatory, file names are not converted without this option. The option is disabled, if the value is empty.

1.4.3 Example

Back to the scenario where the file system uses UTF-8 and the L^AT_EX input files are encoded in `latin1`.

```
\usepackage[latin1]{inputenc}[2006/02/22]
\usepackage[latin1]{inputenx}
\usepackage{graphicx}
\usepackage[encoding,filenameencoding=utf8]{grffile}
```

For older versions of package `inputenc` option `inputencoding` provides the necessary informations.

```

\usepackage[latin1]{inputenc}
\usepackage{graphicx}
\usepackage{grffile}
\grffilesetup{
  \encoding,
  \inputencoding=latin1,
  \filenameencoding=utf8,
}

```

1.5 Option space

This option allows graphics file names that contain spaces if possible.

In general it is not possible to use space inside file names, because T_EX considers the space character as termination in its syntax for commands that expect a file name.

Regarding graphics inclusion with the package `graphics` file names are used in two or three contexts:

1. The basic `\special` statement or primitive command for graphics inclusion. The `\special` statements for drivers `dvips` or `dvipdfm` do not allow spaces. However pdfT_EX's primitive `\pdfximage` uses curly braces to delimit the file name and allows spaces. In case of X_YT_EX file names can be enclosed in quotes to support spaces (at the cost that quotes no longer work).
2. `\includegraphics` checks the existence of the file. Also it looks for the right extension if the extension is not given.

If pdfT_EX 1.30 is given, the file existence test can be rewritten using a new primitive that allows spaces. This works in both modes DVI and PDF.

In case of X_YT_EX the file existence test is rewritten to automatically add quotes.

3. Sometimes files are read as T_EX input files. For example, `.bb` files or MPS files.

If pdfT_EX 1.30 or greater is used in PDF mode then the graphics file names may contain spaces except for MPS files. Therefore option `space` is only enabled by default, if the supported pdfT_EX in PDF mode is detected or X_YT_EX is running. You can enable the option manually, if you know, your DVI driver supports spaces in its `\special` syntax and if there is no need to read the image file as T_EX input file (third context).

1.6 General use

The options can be given at many places:

1. As package options:
`\usepackage[<options>]{grffile}`
2. Setup command of package `grffile`:
`\grffilesetup{<options>}`
3. The options are also available as options for package `graphicx`:
`\setkeys{Gin}{<options>}`
4. If package `graphicx` is loaded the options can also be applied for a single image:
`\includegraphics[<options>]{...}`

1.7 Default settings

multidot	true	
babel	true	
extendedchars	false	
space	true	if pdfTeX 1.30 or greater is used in PDF mode
	false	otherwise

2 Implementation

2.1 New Package status.

Changes to the core `graphics` code have made the main features of this package (supporting multiple dots and spaces in filenames) unneeded as they are supported in the core code. The changes in the core also mean some patches in this package no longer work.

So by default this package does nothing but (especially if you have rolled back other aspects of the latex code) you may want the original version, which is available as

```
\usepackage{grffile}[=2017/06/30]
\new
1 \new
2 \DeclareRelease{v1}{2017-06-30}{grffile-2017-06-30.sty}
3 \DeclareCurrentRelease{}{2019-11-03}
4 \ProvidesPackage{grffile}%
5 [2019/11/03 v2.0 Extended file name support for graphics (legacy)]%
6 \PackageInfo{grffile}{This package is an empty stub for compatibility}
7 \RequirePackage{graphicx}
8 \new
```

2.2 Identification

```
9 \package
10 \NeedsTeXFormat{LaTeX2e}
11 \ProvidesPackage{grffile}%
12 [2017/06/30 v1.18 Extended file name support for graphics (H0)]%
```

2.3 Catcode stuff

```
13 \edef\grffile@RestoreCatcodes{%
14 \catcode'\noexpand\=\the\catcode'\=\relax
15 \catcode'\noexpand\:\the\catcode'\:\relax
16 \catcode'\noexpand\.\the\catcode'\.\relax
17 \catcode'\noexpand\' \the\catcode'\'\relax
18 \catcode'\noexpand\<\the\catcode'\<\relax
19 \catcode'\noexpand\>\the\catcode'\>\relax
20 \catcode'\noexpand*\the\catcode'\*\relax
21 \catcode'\noexpand\~\the\catcode'\~\relax
22 \catcode'\noexpand\~\the\catcode'\~\relax
23 }
24 \@makeother\=
25 \@makeother\:
26 \@makeother\.
27 \@makeother\'
28 \@makeother\<
29 \@makeother\>
```

```

30 \@makeother\*
31 \catcode'\^=7 %
32 \catcode'\~=\active

```

2.4 Options

```

33 \RequirePackage{ifpdf}[2010/01/28]
34 \RequirePackage{ifxetex}[2010/09/12]
35 \RequirePackage{kvoptions}[2006/08/17]
36 \SetupKeyvalOptions{%
37   family=Gin,%
38   prefix=grffile@%
39 }
40 \DeclareDefaultOption{\@unknownoptionerror}
41 \DeclareBoolOption[true]{multidot}
42 \DeclareBoolOption[true]{babel}
43 \DeclareBoolOption[false]{extendedchars}
44 \DeclareBoolOption{space}
45 \DeclareVoidOption{encoding}{%
46   \RequirePackage{stringenc}\relax
47 }
48 \DeclareStringOption{inputencoding}
49 \DeclareStringOption{filenameencoding}
50 \DeclareDefaultOption{%
51   \PassOptionsToPackage\CurrentOption{graphics}%
52 }

```

Default setting for option space.

```

53 \RequirePackage{pdftexcmds}[2007/11/11]
54 \ifxetex
55   \grffile@spacetrue
56 \else
57   \begingroup\expandafter\expandafter\expandafter\endgroup
58   \expandafter\ifx\csname pdf@filesize\endcsname\relax
59     \grffile@spacefalse
60     \let\grffile@space@disabled\@empty
61     \def\grffile@spacetrue{%
62       \PackageWarning{grffile}{%
63         Option 'space' is not available,\MessageBreak
64         because it needs pdfTeX >= 1.30 or XeTeX%
65       }%
66     }%
67   \else
68     \ifpdf
69       \grffile@spacetrue
70     \else
71       \grffile@spacefalse
72     \fi
73   \fi
74 \fi
75 \ProcessKeyvalOptions*
76 \AtBeginDocument{%
77   \DisableKeyvalOption[package=grffile]{Gin}{encoding}%
78 }
79 \RequirePackage{graphics}

```

\grffilesetup

```

80 \newcommand*\grffilesetup{%
81   \setkeys{Gin}%

```

82 }

\grffile@org@Ginclude@graphics

83 \let\grffile@org@Ginclude@graphics\Ginclude@graphics

\Ginclude@graphics

```
84 \renewcommand*{\Ginclude@graphics}{%
85   \ifx\grffile@filenameencoding\@empty
86   \else
87     \ifx\grffile@inputencoding\@empty
88       \expandafter\ifx\csname inputencodingname\endcsname\relax
89         \expandafter\ifx\csname
90           CurrentInputEncodingOption\endcsname\relax
91         \else
92           \let\grffile@inputencoding\CurrentInputEncodingOption
93         \fi
94       \else
95         \let\grffile@inputencoding\inputencodingname
96       \fi
97     \fi
98     \ifx\grffile@inputencoding\@empty
99     \else
100       \grffile@extendedcharstrue
101     \fi
102   \fi
103   \ifnum0\ifgrffile@babel 1\fi\ifgrffile@extendedchars 1\fi>\z@
104   \begingroup
```

Support of babel's shorthand characters.

```
105     \ifgrffile@babel
106     \csname @safe@activestruel\endcsname
```

Support of active tilde.

```
107     \edef~{\string~}%
```

Support of characters controlled by package inputenc.

```
108     \fi
109     \ifgrffile@extendedchars
110       \grffile@inputenc@loop\^^A\^^H%
111       \grffile@inputenc@loop\^^K\^^K%
112       \grffile@inputenc@loop\^^N\^^_%
113       \grffile@inputenc@loop\^^?\^^ff%
114     \fi
115     \expandafter\grffile@extchar@Ginclude@graphics
116   \else
117     \expandafter\grffile@Ginclude@graphics
118   \fi
119 }
```

ffile@extchar@Ginclude@graphics

```
120 \def\grffile@extchar@Ginclude@graphics#1{%
121   \toks@{#1}%
122   \edef\grffile@filename{\the\toks@}%
123   \ifx\grffile@inputencoding\@empty
124   \else
125     \ifx\grffile@filenameencoding\@empty
126     \else
127       \ifx\grffile@inputencoding\grffile@filenameencoding
128       \else
```

```

129 \expandafter\ifx\csname StringEncodingConvert\endcsname\relax
130 \PackageError{grffile}{%
131 Package 'stringenc' is not loaded,\MessageBreak
132 omitting file name conversion%
133 }\@ehc
134 \else
135 \StringEncodingConvert\grffile@temp\grffile@filename
136 \grffile@inputencoding\grffile@filenameencoding
137 \StringEncodingSuccessFailure{%
138 \let\grffile@filename\grffile@temp
139 }{%
140 \PackageError{grffile}{%
141 Filename conversion failed%
142 }\@ehc
143 }%
144 \fi
145 \fi
146 \fi
147 \fi
148 % \toks@\expandafter{\grffile@filename}%
149 \edef\x{\endgroup
150 % \noexpand\grffile@Ginclude@graphics{\the\toks@}%
151 \noexpand\grffile@Ginclude@graphics{\grffile@filename}%
152 }%
153 \x
154 }

```

\grffile@inputenc@loop

```

155 \def\grffile@inputenc@loop#1#2{%
156 \count@=#1\relax
157 \loop
158 \begingroup
159 \uccode'\~=\count@
160 \uppercase{%
161 \endgroup
162 \edef~{\string~}%
163 }%
164 \ifnum\count@<#2\relax
165 \advance\count@\@ne
166 \repeat
167 }

```

Support for option space

\grffile@space@getbase

```

168 \def\grffile@space@getbase#1{%
169 \edef\grffile@tempa{%
170 \def\noexpand\@tempa####1#1\noexpand\@nil{%
171 \def\noexpand\Gin@base{####1}%
172 }%
173 }%
174 \grffile@ifFileExists{\filename@area\filename@base#1}{%
175 \grffile@tempa
176 \expandafter\@tempa\grffile@file@found\@nil
177 \edef\Gin@ext{#1}%
178 }{%
179 }%
180 }

```



```

181 \begingroup\expandafter\expandafter\expandafter\endgroup
182 \expandafter\ifx\csname pdf@filesize\endcsname\relax
183   \ifxetex

```

\grffile@XeTeX@ifFileExists

```

184   \long\def\grffile@XeTeX@ifFileExists#1{%
185     \openin\@inputcheck"#1" %
186     \ifeof\@inputcheck
187       \closein\@inputcheck
188       \expandafter\@secondoftwo
189     \else
190       \closein\@inputcheck
191       \expandafter\@firstoftwo
192     \fi
193   }%

```

\grffile@ifFileExists

```

194   \long\def\grffile@ifFileExists#1{%
195     \grffile@XeTeX@ifFileExists{#1}{%
196       \edef\grffile@file@found{#1}%
197       \@firstoftwo
198     }{%
199       \let\reserved@a\@secondoftwo
200       \ifx\input@path\@undefined
201       \else
202         \expandafter\@tfor\expandafter\reserved@b\expandafter
203         : \expandafter=\input@path\do{%
204           \grffile@XeTeX@ifFileExists{\reserved@b#1}{%
205             \edef\grffile@file@found{\reserved@b#1}%
206             \let\reserved@a\@firstoftwo
207             \iftrue\@break@tfor\fi
208           }{}%
209         }%
210       \fi
211       \reserved@a
212     }%
213   }%

```

\grffile@org@Gread@QTm Patch \Gread@QTm of xetex.def.

```

214   \def\grffile@org@Gread@QTm#1{%
215     \IfFileExists{\Gin@base.bb}{%
216       \Gread@eps{\Gin@base.bb}%
217     }{%
218       \G@measure@QTm{\Gin@base}{\Gin@ext}%
219     }%
220   }%
221   \ifx\Gread@QTm\grffile@org@Gread@QTm

```

\Gread@QTm

```

222   \def\Gread@QTm#1{%
223     \grffile@ifFileExists{\Gin@base.bb}{%
224       \Gread@eps{\Gin@base.bb}%
225     }{%
226       \G@measure@QTm{\Gin@base}{\Gin@ext}%
227     }%
228   }%

```

```

229     \PackageInfo{grffile}{\string\Gread@QTm\space patched}%
230 \else
231   \begingroup\expandafter\expandafter\expandafter\endgroup
232   \expandafter\ifx\csname Gread@QTm\endcsname\relax
233     \ifpackagelater{graphics}{2017/06/01}
234     {}
235     {%
236       \PackageWarning{grffile}{%
237         \string\Gread@QTm\space of xetex.def not found%
238       }%
239     }%
240 \else

\grffile@org@Gread@QTm
241   \let\grffile@org@Gread@QTm\Gread@QTm

\Gread@QTm
242   \def\Gread@QTm#1{%
243     \let\grffile@saved@ifFileExists@ifFileExists
244     \let\ifFileExists\grffile@ifFileExists
245     \grffile@org@Gread@QTm{#1}%
246     \let\ifFileExists\grffile@saved@ifFileExists
247   }%

248   \fi
249 \fi

\grffile@org@Gread@eps
250   \let\grffile@org@Gread@eps\Gread@eps

251   \def\grffile@temp#1\immediate\openin#2 #3\grffile@nil#4\grffile@NIL{%
252     \begingroup
253     \toks@{#2}%
254     \edef\grffile@temp{\the\toks@}%
255     \def\grffile@test{\@inputcheck###1}%
256     \ifx\grffile@temp\grffile@test
257       \expandafter\@firstoftwo
258     \else
259       \expandafter\@secondoftwo
260     \fi
261     {%
262       \toks@{%
263         #1%
264         \immediate\openin\@inputcheck"###1"\relax
265         #3%
266       }%
267       \expandafter\endgroup
268       \expandafter\def\expandafter\Gread@eps
269       \expandafter##\expandafter1\expandafter{%
270         \the\toks@
271       }%
272       \PackageInfo{grffile}{%
273         \string\Gread@eps\space patched%
274       }%
275     }{%
276       \ifpackagelater{graphics}{2017/06/01}
277       {}
278       {%

```

```

279         \PackageWarning{grffile}{%
280             Unsupported \string\Gread@eps\space not patched%
281         }%
282     }%
283 \endgroup
284 }%
285 }%
286 \expandafter\grffile@temp\Gread@eps{#1}\grffile@nil
287     \immediate\openin{} \grffile@nil\grffile@NIL
288 \else
289     \begingroup
290     \let\on@line\@empty
291     \PackageInfo{grffile}{%
292         \string\grffile@ifFileExists\space without space support,%
293         \MessageBreak
294         because pdfTeX's \string\pdffilesize\space is not available%
295         \MessageBreak
296         or XeTeX is not running%
297     }%
298 \endgroup

\grffile@ifFileExists

299 \long\def\grffile@ifFileExists#1{%
300     \ifFileExists{#1}{%
301         \let\grffile@IFE@next\@firstoftwo
302     }{%
303         \let\grffile@file@found\@file@found
304         \let\grffile@IFE@next\@secondoftwo
305     }%
306     \grffile@IFE@next
307 }%

308 \fi
309 \else

\grffile@ifFileExists

310 \long\def\grffile@ifFileExists#1{%
311     \expandafter\expandafter\expandafter
312     \ifx\expandafter\expandafter\expandafter\\pdf@filesize{#1}\\%
313         \let\reserved@a\@secondoftwo
314         \ifx\input@path\@undefined
315         \else
316             \expandafter\@tfor\expandafter\reserved@b\expandafter
317             : \expandafter=\input@path\do{%
318                 \expandafter\expandafter\expandafter
319                 \ifx\expandafter\expandafter\expandafter
320                     \\pdf@filesize{\reserved@b#1}\\%
321                 \else
322                     \edef\grffile@file@found{\reserved@b#1}%
323                     \let\reserved@a\@firstoftwo
324                     \@break@tfor
325                 \fi
326             }%
327         \fi
328         \expandafter\reserved@a
329     \else
330         \edef\grffile@file@found{#1}%
331         \expandafter\@firstoftwo

```

```

332 \fi
333 }%

334 \fi

\grffile@Ginclude@graphics
335 \def\grffile@Ginclude@graphics#1{%
336 \begingroup
337 \ifgrffile@space
338 \let\Gin@getbase\grffile@space@getbase
339 \fi
340 \ifgrffile@multidot
341 \let\filename@base\@empty
342 \let\filename@simple\grffile@filename@simple
343 \fi
344 \grffile@org@Ginclude@graphics{#1}%
345 \endgroup
346 }%

\grffile@filename@simple
347 \def\grffile@filename@simple#1.#2\\{%
348 \ifx\\#2\\%
349 \def\filename@base{#1}%
350 \let\filename@ext\relax
351 \else
352 \def\filename@base{}%
353 \grffile@analyze@ext{#1}.#2\\%
354 \fi
355 }

\grffile@analyze@ext
356 \def\grffile@analyze@ext#1.#2\\{%
357 \let\grffile@next\relax
358 \ifx\\#2\\%
359 \edef\filename@base{\filename@base#1}%
360 \let\filename@ext\relax
361 \def\grffile@next{\grffile@try@extlist}%
362 \else
363 \edef\filename@base{\filename@base #1}%
364 \edef\filename@ext{\filename@dot#2\\}%
365 \expandafter\ifx\csname Gin@rule@.\filename@ext\endcsname\relax
366 \edef\filename@base{\filename@base.}%
367 \def\grffile@next{\grffile@analyze@ext#2\\}%
368 \else
369 \grffile@ifFileExists{\filename@area\filename@base.\filename@ext}{%
370 % success
371 }{%
372 \edef\filename@base{\filename@base.\filename@ext}%
373 \let\filename@ext\relax
374 \def\grffile@next{\grffile@try@extlist}%
375 }%
376 \fi
377 \fi
378 \grffile@next
379 }

\grffile@try@extlist
380 \def\grffile@try@extlist{%

```

```

381 \@for\grffile@temp:=\Gin@extensions\do{%
382   \grffile@ifFileExists{\filename@area\filename@base\grffile@temp}{%
383     \ifx\filename@ext\relax
384       \edef\filename@ext{\expandafter\@gobble\grffile@temp\@empty}%
385     \fi
386   }{}%
387 }%
388 \ifx\filename@ext\relax
389   \expandafter\let\expandafter\filename@base\expandafter\@empty
390   \expandafter\grffile@use@last@ext\filename@base.\\%
391 \fi
392 }

```

\grffile@use@last@ext

```

393 \def\grffile@use@last@ext#1.#2\\{%
394   \ifx\#2\\%
395     \edef\filename@base{\expandafter\filename@dot\filename@base\\}%
396     \def\filename@ext{#1}%
397     \expandafter\@gobble
398   \else
399     \edef\filename@base{\filename@base#1.}%
400     \expandafter\@firstofone
401   \fi
402   {%
403     \grffile@use@last@ext#2\\%
404   }%
405 }

```

Print current option setting

\grffile@option@status

```

406 \def\grffile@option@status#1{%
407   \begingroup
408     \let\on@line\@empty
409     \PackageInfo{grffile}{%
410       Option ‘#1’ is %
411       \expandafter\ifx\csname ifgrffile@#1\expandafter\endcsname
412         \csname iftrue\endcsname
413       set to ‘true’%
414     \else
415       \expandafter\ifx\csname grffile@#1@disabled\endcsname\@empty
416       not available%
417     \else
418       set to ‘false’%
419     \fi
420   \fi
421 }%
422 \endgroup
423 }

424 \grffile@option@status{multidot}
425 \grffile@option@status{extendedchars}
426 \grffile@option@status{space}

```

2.5 Fix \Gin@ii of package graphicx

If the image file name contains the hash character macro \Gin@ii of package graphicx breaks.

\grffile@Gin@ii@graphicx

```
427 \def\grffile@Gin@ii@graphicx[#1]#2{%
428   \def\@tempa{[]}%
429   \def\@tempb{#2}%
430   \ifx\@tempa\@tempb
431     \def\@tempa{\Gin@iii[#1] []}% hash-ok
432     \expandafter\@tempa
433   \else
434     \begingroup
435     \@tempswafalse
436     \toks@{\Gin@ii@graphicx{#2}}%
437     \setkeys{Gin}{#1}%
438     \Gin@esetsize
439     \the\toks@
440   \endgroup
441   \fi
442 }
```

\grffile@Gin@ii@fixed

```
443 \def\grffile@Gin@ii@fixed[#1]#2{%
444   \def\@tempa{[]}%
445   \begingroup
446     \toks@={#2}%
447     \edef\@tempb{\the\toks@}%
448   \expandafter\endgroup
449   \ifx\@tempa\@tempb
450     \def\@tempa{\Gin@iii[#1] []}% hash-ok
451     \expandafter\@tempa
452   \else
453     \begingroup
454     \@tempswafalse
455     \toks@{\Gin@ii@fixed{#2}}%
456     \setkeys{Gin}{#1}%
457     \Gin@esetsize
458     \the\toks@
459   \endgroup
460   \fi
461 }
```

\grffile@Fix@Gin@ii

```
462 \def\grffile@Fix@Gin@ii{%
463   \let\Gin@ii\grffile@Gin@ii@fixed
464   \begingroup
465     \escapechar=92 %
466     \PackageInfo{grffile}{\string\Gin@ii\space of package 'graphicx' fixed}%
467   \endgroup
468 }

469 \ifx\Gin@ii\grffile@Gin@ii@graphicx
470   \grffile@Fix@Gin@ii
471 \else
472   \AtBeginDocument{\grffile@Fix@Gin@ii}%
473 \fi

474 \grffile@RestoreCatcodes
475 \endpackage
```

3 Test

3.1 Multidot with default rule

```
476 \begin{document}
477 \NeedsTeXFormat{LaTeX2e}
478 \documentclass{article}
479 \usepackage{filecontents}
480 % file grffile-test.mp:
481 % \begin{figure}
482 %   \draw [thick] (0,0) circle [radius=2cm];
483 % \end{figure}
484 % end
485 \begin{filecontents*}{grffile-test.1}
486 %!PS
487 %%BoundingBox: -32 -32 32 32
488 %%Creator: MetaPost
489 %%CreationDate: 2004.06.16:1257
490 %%Pages: 1
491 %%EndProlog
492 %%Page: 1 1
493 0 5.66928 dtransform truncate idtransform setlinewidth pop [] 0 setdash
494 1 setlinejoin 10 setmiterlimit
495 newpath 28.34645 0 moveto
496 28.34645 7.51828 25.35938 14.72774 20.04356 20.04356 curveto
497 14.72774 25.35938 7.51828 28.34645 0 28.34645 curveto
498 -7.51828 28.34645 -14.72774 25.35938 -20.04356 20.04356 curveto
499 -25.35938 14.72774 -28.34645 7.51828 -28.34645 0 curveto
500 -28.34645 -7.51828 -25.35938 -14.72774 -20.04356 -20.04356 curveto
501 -14.72774 -25.35938 -7.51828 -28.34645 0 -28.34645 curveto
502 7.51828 -28.34645 14.72774 -25.35938 20.04356 -20.04356 curveto
503 25.35938 -14.72774 28.34645 -7.51828 28.34645 0 curveto closepath stroke
504 showpage
505 %%EOF
506 \end{filecontents*}
507 \usepackage{graphicx}
508 \usepackage[multidot]{grffile}[2008/10/13]
509 \DeclareGraphicsRule{*}{mps}{*}{} % for pdflatex
510 \begin{document}
511 \includegraphics{grffile-test.1}
512 \end{document}
513 \end{document}
```

4 Installation

4.1 Download

Package. This package is available on CTAN¹:

[CTAN:macros/latex/contrib/grffile/grffile.dtx](http://ctan.org/macros/latex/contrib/grffile/grffile.dtx) The source file.

[CTAN:macros/latex/contrib/grffile/grffile.pdf](http://ctan.org/macros/latex/contrib/grffile/grffile.pdf) Documentation.

Bundle. All the packages of the bundle ‘oberdiek’ are also available in a TDS compliant ZIP archive. There the packages are already unpacked and the documentation files are generated. The files and directories obey the TDS standard.

¹<http://ctan.org/pkg/grffile>

CTAN:install/macros/latex/contrib/grffile.tds.zip

TDS refers to the standard “A Directory Structure for T_EX Files” (CTAN:tds/tds.pdf). Directories with `texmf` in their name are usually organized this way.

4.2 Bundle installation

Unpacking. Unpack the `oberdiek.tds.zip` in the TDS tree (also known as `texmf` tree) of your choice. Example (linux):

```
unzip oberdiek.tds.zip -d ~/texmf
```

Script installation. Check the directory `TDS:scripts/oberdiek/` for scripts that need further installation steps. Package `attachfile2` comes with the Perl script `pdfatfi.pl` that should be installed in such a way that it can be called as `pdfatfi`. Example (linux):

```
chmod +x scripts/oberdiek/pdfatfi.pl
cp scripts/oberdiek/pdfatfi.pl /usr/local/bin/
```

4.3 Package installation

Unpacking. The `.dtx` file is a self-extracting `docstrip` archive. The files are extracted by running the `.dtx` through plain T_EX:

```
tex grffile.dtx
```

TDS. Now the different files must be moved into the different directories in your installation TDS tree (also known as `texmf` tree):

```
grffile.sty          → tex/latex/grffile/grffile.sty
grffile.pdf          → doc/latex/grffile/grffile.pdf
test/grffile-test1.tex → doc/latex/grffile/test/grffile-test1.tex
grffile.dtx          → source/latex/grffile/grffile.dtx
```

If you have a `docstrip.cfg` that configures and enables `docstrip`’s TDS installing feature, then some files can already be in the right place, see the documentation of `docstrip`.

4.4 Refresh file name databases

If your T_EX distribution (teT_EX, mikT_EX, ...) relies on file name databases, you must refresh these. For example, teT_EX users run `texhash` or `mktextlsr`.

4.5 Some details for the interested

Attached source. The PDF documentation on CTAN also includes the `.dtx` source file. It can be extracted by AcrobatReader 6 or higher. Another option is `pdftk`, e.g. unpack the file into the current directory:

```
pdftk grffile.pdf unpack_files output .
```


Unpacking with L^AT_EX. The .dtx chooses its action depending on the format:

plain T_EX: Run docstrip and extract the files.

L^AT_EX: Generate the documentation.

If you insist on using L^AT_EX for docstrip (really, docstrip does not need L^AT_EX), then inform the autodetect routine about your intention:

```
latex \let\install=y\input{grffile.dtx}
```

Do not forget to quote the argument according to the demands of your shell.

Generating the documentation. You can use both the .dtx or the .drv to generate the documentation. The process can be configured by the configuration file ltxdoc.cfg. For instance, put this line into this file, if you want to have A4 as paper format:

```
\PassOptionsToClass{a4paper}{article}
```

An example follows how to generate the documentation with pdfL^AT_EX:

```
pdflatex grffile.dtx
makeindex -s gind.ist grffile.idx
pdflatex grffile.dtx
makeindex -s gind.ist grffile.idx
pdflatex grffile.dtx
```

5 Catalogue

The following XML file can be used as source for the [T_EX Catalogue](#). The elements `caption` and `description` are imported from the original XML file from the Catalogue. The name of the XML file in the Catalogue is `grffile.xml`.

```
514 (*catalogue)
515 <?xml version='1.0' encoding='us-ascii'?>
516 <!DOCTYPE entry SYSTEM 'catalogue.dtd'>
517 <entry datestamp='$Date$' modifier='$Author$' id='grffile'>
518   <name>grffile</name>
519   <caption>Extended file name support for graphics.</caption>
520   <authorref id='auth:oberdiek' />
521   <copyright owner='Heiko Oberdiek' year='2006-2012' />
522   <license type='lppl1.3' />
523   <version number='1.18' />
524   <description>
525     The package extends the file name processing of package
526     <xref refid='graphics'>graphics</xref> to support a larger range
527     of file names. For example, the file name may contain several dots.
528
529     Or in case of <xref refid='pdftex'>pdfTeX</xref> in PDF mode the
530     file name may contain spaces.
531   <p/>
532   The package is part of the <xref refid='oberdiek'>oberdiek</xref>
533   bundle.
534 </description>
535 <documentation details='Package documentation'
536   href='ctan:/macros/latex/contrib/grffile/grffile.pdf' />
537 <ctan file='true' path='/macros/latex/contrib/grffile/grffile.dtx' />
538 <miktex location='oberdiek' />
```

```

539 <texlive location='oberdiek' />
540 <install path='/macros/latex/contrib/grffile/grffile.tds.zip' />
541 </entry>
542 </catalogue>

```

6 References

- [1] David Carlisle, Sebastian Rahtz: *The graphics package*; 2006/02/20 v1.0o;
[CTAN:macros/latex/required/graphics/graphics.dtx](#).
- [2] Sebastian Rahtz, Heiko Oberdiek: *The graphicx package*; 1999/02/16 v1.0f;
[CTAN:macros/latex/required/graphics/graphicx.dtx](#).

7 History

[2004/07/18 v0.5]

- First version, published in newsgroup [de.comp.text.tex](#):
“[Re: Dateinamenproblem](#)”²

[2006/08/15 v1.0]

- File existence check by new primitives of pdfTeX 1.30.
- Implementation partly rewritten.
- New DTX framework.

[2006/08/17 v1.1]

- Adaptation to version 2.3 of package kvoptions.

[2006/11/30 v1.2]

- New option babel. Before this feature was part of option extendedchars.

[2007/04/11 v1.3]

- Line ends sanitized.

[2007/06/13 v1.4]

- Encoding support added with options encoding, inputencoding, and filenameencoding.

[2007/08/16 v1.5]

- Bug fix in encoding support.

[2007/11/11 v1.6]

- Use of package pdftexcmds for LuaTeX support.

²Url: <http://groups.google.com/group/de.comp.text.tex/msg/b85984095d1a3c95>

[2007/11/24 v1.7]

- Bug fix of broken previous version.

[2008/08/11 v1.8]

- Code is not changed.
- URLs updated.

[2008/10/13 v1.9]

- Fix for option ‘multidot’ with default rule.

[2009/09/25 v1.10]

- Rewrite of ‘multidot’ algorithm to fix a problem (‘multidot’ with `\graphicspath`).

[2010/01/28 v1.11]

- Undefined `\pdf@filesize` fixed.

[2010/08/26 v1.12]

- Macro `\Gin@ii` of package `graphicx` fixed for the case that the file name contains a hash.

[2010/12/09 v1.13]

- Option `space` also supports \TeX .

[2011/10/04 v1.14]

- Fix for option `space` support of \TeX for EPS files (`\Gread@eps`). (Bug reported by Peter Davis.)

[2011/10/17 v1.15]

- Bug fix for option `space` support of \TeX . Wrong usage of `\@break@tfor` fixed. (Bug reported by Martin Schröder.)

[2012/04/05 v1.16]

- Some fix for option `extendedchars`.

[2016/05/16 v1.17]

- Documentation updates.

[2017/06/30 v1.18]

- Update to follow `graphics` changes.

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